* CUSTOMER INFORMATION VERSION *

Plan check correction list for apartments, condominiums, and other multifamily residential projects

The items listed below are commonly omitted from plans submitted for review. Advance preparation by applicants to satisfy these requirements will help expedite the plan review process. Be advised: Just as specific items on this list may not apply to specific projects, this list also does not necessarily include all requirements for all projects; other items may apply. Please use this list as a guide only.

A. GENERAL REQUIREMENTS

1. The approval of plans and specifications does not permit the violation of any section of the building code, county ordinances, or state law. The following list does not necessarily include all errors and omissions. (See the 2010 *California Building Code*, Section 105.4)

2. The following supplements may be required for approval. Compliance with these items must be obtained prior to permit issuance:
   - ❑ Accessibility correction lists: _____
   - ❑ Stormwater Intake Form (LUEG:SWa) and Minor Stormwater Management Plan (LUEG:SWb)
   - ❑ Sample stormwater BMP presentation (PDS #272)
   - ❑ Eave construction guidance document (PDS #198)
   - ❑ Special inspection summary (PDS #006)
   - ❑ List of approved special inspection agencies and construction material testing laboratories
   - ❑ Other : _____

3. **Please read your Conditions of Approval list**. We recommend you satisfy the "Structural Approval" (i.e., this building code review) and "Planner Approval" conditions (if required) **before** submitting your plans to the fire district for review. Additionally we recommend you retain all previously reviewed sets until permit issuance.

4. Plans must incorporate the necessary information on printed sheets. Plans in pen or pencil, with crossed out or taped on information, or with white-out will not be accepted.

B. PLAN REQUIREMENTS

1. Specify on plans the project will comply with the following building codes and associated County of San Diego amendments:
   - ❑ 2010 *California Building Code*
   - ❑ 2010 *California Green Building Standards Code*
   - ❑ 2010 *California Electrical Code*
   - ❑ 2010 *California Plumbing Code*
   - ❑ 2010 *California Fire Code*
   - ❑ 2008 *California Building Energy Efficiency Standards*

2. On sheet ___ provide an itemized "Scope of Work" describing the work to be performed and identifying the buildings and structures included under this permit.

3. Scope of work on plans does not match scope on permit application. See PDS technician to revise permit application scope.

4. Provide fully dimensioned plot plan drawn to scale and indicating the following:
   - ❑ Lot dimensions with property lines and any easements identified
   - ❑ Size and use of all structures on the lot
   - ❑ Dimensions from structures to property lines (measured at right angles to structures)
   - ❑ Dimensions between structures (measured at right angles to structures)

5. Plans are incomplete. Plan check will proceed with submittal of complete plans. Use this list as a guide in preparing plans.

6. The plans must be prepared using accepted drafting procedures and practice. You must retain the services of a California-licensed engineer or architect to help you prepare your plans and respond to the circled corrections on this list.

7. Provide two sets of calculations prepared, stamped, and signed by California-licensed civil engineer or architect for:
   - ❑ Vertical load supporting system
   - ❑ Lateral load (wind/seismic) resisting system
   - ❑ Retaining walls
   - ❑ Other _____

8. All sheets of the plans must bear the stamp and wet signature of a California-licensed civil engineer or architect.

9. Special inspection required for the following (CBC 1704):
   - ❑ Concrete anchors
   - ❑ Wood shear walls and/or diaphragms with nailing less than 4 inches on center
   - ❑ High-strength concrete
   - ❑ Masonry
   - ❑ High-strength bolts
   - ❑ Field welding
   - ❑ Moment frames
   - ❑ Other _____

10. Complete PDS #006 special inspection summary (or equivalent) – listing elements required per item B.9 – and make a permanent part of plans. Specify certified special inspector and phone number on the form.

11. Provide **large, clear** note on **plot plan**: "Special inspection required. See special inspection form on sheet _____."

12. Clearly distinguish on plans between proposed (new), as-built (non-permitted), and existing (permitted) construction.

13. Provide certification report(s) for all non-permitted and as-built construction per the following:
   - ❑ Produced, signed, and stamped by California-licensed engineer or architect
   - ❑ Certifies construction matches plans submitted for permit
   - ❑ Specifies measures performed for certification with hidden construction verified by testing and/or destructive examination
   - ❑ Addresses structural/life safety, electrical, plumbing, and mechanical systems
     Exception: In lieu of certification reports, applicant may submit detailed certification plan – subject to plan checker approval – specifying how existing construction will be examined and noncompliant construction will be remedied

14. Specify on plans floor areas for each proposed or existing building.

15. Provide complete dimensions on floor plans.

16. Name, label, and specify on floor plans the use of each room or space.

17. Specify on plans the occupancy for each room or space.

18. Specify on plans the occupancy and use of any existing rooms or spaces adjoining proposed construction.

19. Specify on plans the type of construction for each building.

20. Provide a wall legend identifying new walls, existing walls to remain, and existing walls to be removed.

21. Foundation and framing plans shall be the same orientation as the floor plan.

22. Provide legend/definitions for all symbols, shaded areas, etc., used on plans.

23. Remove all "build per code" and "not for construction" notes from plans.

24. Provide a sheet index coordinated with plans.

C. SITE REQUIREMENTS

1. Post site identification cards and call for site inspection. Once the site inspection has been completed, call (858) 565-5920 to confirm the results. Additional correction items may apply based on the results.

2. Project may be located in a watercourse or flood area. Department of Public Works (DPW) approval is required.

3. Project located in an Alquist-Priolo Earthquake Fault Zone. Provide a geotechnical report prepared, stamped, and signed by a California-licensed civil engineer demonstrating the proposed building(s) will not be constructed across the trace of an active fault.

4. Rough grading approval from PDS Land Development & DPW PDCI is required.

5. Soils report required (2 copies).

6. Compaction report required (2 copies).

7. Compaction reports more than 5 years old must include an update letter by a California-licensed civil engineer.

8. *Note on the plans:* "The inspector will recheck for expansive soils and/or grading requirements at the first foundation inspection."

9. Indicate on plot plan the location and square footage of land-disturbance activity.

10. Provide Waste Discharge Identification Number (WDID) obtained from the State Water Resources Control Board (SWRCB) when total area of land disturbance is 1 acre or more. To obtain the WDID, state regulations require filing a Notice of Intent (NOI) and fee with the SWRCB. Contact the SWRCB for Stormwater Pollution Prevention Plan (SWPPP) requirements.

11. Provide completed and signed Stormwater Intake Form (pages 1-2 of form LUEG:SWa) to determine stormwater management plan requirements.

12. Project requires completed Minor Stormwater Management Plan (pages 1-6 of form LUEG:SWb) indicating the following:
    - ❑ Project information and applicant's signature
    - ❑ Impervious area calculations (page 1 – use sheet 2 of PDS #272 as a guide)
    - ❑ Erosion control BMPs (page 3, table I, sections A, B, and/or C)
    - ❑ Sediment control BMPs (page 3, table I, section D)
    - ❑ Site management BMPs (page 3, table I, sections E and F)
    - ❑ Low impact development BMPS (page 4, table II)
    - ❑ Post-construction/permanent BMPs (page 5, table III)

13. Project requires Major Stormwater Management Plan. Provide a copy for review.

14. Provide BMP plan per the following (we recommend the PDS plot plan AutoCAD template with BMP legend available for download at http://www.sdcounty.ca.gov/dplu/bldgforms/index.html):
    - ❑ Indicating general direction of site drainage
    - ❑ Identifying location of proposed erosion control BMPs per Minor/Major SWMP
    - ❑ Identifying location of proposed sediment control BMPs per Minor/Major SWMP
    - ❑ Identifying location of proposed site management BMPs per Minor/Major SWMP
    - ❑ Identifying location of proposed low impact development and permanent BMPs per Minor/Major SWMP
    - ❑ Including table or legend defining each BMP symbol (see PDS #272 sample plan)

D. ALLOWABLE AREA AND HEIGHT

1. Building exceeds maximum area per story allowed in CBC Table 503.

2. Specify on plans any buildings on same lot considered as portions of a single building. (CBC 705.3)

3. Provide on plans an area analysis and specify/calculate all allowable area increases/modifications. (CBC 506, CBC 507)

4. Indicate on plans location of any fire walls (area separation walls). _____-hour-rated fire walls required per CBC Table 706.4.

5. Detail fire wall assemblies. Specify CBC Table 720.1(2) assembly number or cite reference for alternate approved assembly.

6. Fire walls shall be of approved non-combustible materials – except type V construction -- and have sufficient structural stability to allow collapse of construction on either side without collapse of wall for duration of its fire rating. (CBC 706.2, CBC 706.3)

7. Fire walls do not meet CBC 706 provisions for ❑ horizontal continuity, ❑ vertical continuity, ❑ opening location/size.

8. Dimension grade plane and building height on all building sections and elevations.

9. Building exceeds ❑ height above grade plane ❑ number of stories allowed in CBC Table 503.

10. Specify on plans all height and/or story increases. (CBC 504.2, CBC 504.3)

E. TYPE OF CONSTRUCTION

1. Building does not comply with type _____ construction for ❑ structural frame, ❑ exterior bearing walls, ❑ interior bearing walls, ❑ floor construction, ❑ roof construction. (CBC Table 601)

F. EXTERIOR WALLS

1. Dimension on the plot plan the location of all imaginary property lines between buildings on the same lot. (CBC 705.3)

2. All exterior walls within _____ feet of property line must be minimum _____ hour-rated construction. (CBC 705.5, CBC Table 602)

3. Detail fire-rated exterior wall assemblies. Specify CBC Table 720.1(2) assembly number or cite reference for alternate approved assembly.

4. ❑ Unprotected openings ❑ protected openings in exterior walls not allowed within _____ feet of property line. (CBC Table 705.8)

5. Exterior wall openings within _____ feet of property line exceed maximum allowable area per CBC Table 705.8 and CBC Equation 7-2.

6. Doors considered as protected openings in _____-hour-rated exterior walls shall be _____-hour-rated and self- or automatic-closing. (CBC Table 715.4)

7. Windows considered as protected openings in _____-hour-rated exterior walls shall be _____-hour-rated. (CBC Table 715.5)

8. Provide 3/4-hour-rated protection for openings less than 15 feet vertically above the roof of an adjoining/adjacent building on the same lot within 15 feet of imaginary property line between the two buildings. (CBC 705.8.6)

9. Provide parapets at exterior walls within _____ of property line per CBC 705.11.

10. Projections (cornices, eave overhangs, exterior balconies, architectural appendages) shall not extend beyond any of the following (CBC 705.2):
    - ❑ One-third the distance from the exterior face of the wall to the lot line where protected openings or a combination of protected and unprotected openings are required in the exterior wall
    - ❑ One-half the distance from the exterior face of the wall to the lot line where all openings in the exterior wall may be unprotected or the building is sprinklered with openings protected per CBC 705.8.2
    - ❑ 12 inches into areas where openings are prohibited

11. Combustible projections located where openings not permitted or where protected openings required shall be of 1-hour-rated construction, heavy-timber construction, fire-retardant-treated wood, or as specified by CBC 1406.3. (CBC 705.2.3)

G. FIRE BARRIERS, FIRE PARTITIONS, AND SHAFT ENCLOSURES

1. _____-hour-rated fire barriers (occupancy separations) required between _____ and _____ occupancies. (CBC Table 508.4)

2. Provide _____-hour-rated fire barrier between _____ occupancy and incidental use area labeled _____. (CBC Table 508.2.5)

3. Detail vertical and horizontal fire barrier assemblies and show adequate continuity through concealed spaces. Specify CBC Table 720.1(2) and/or CBC Table 720.1(3) assembly numbers on plans or cite reference for alternate approved assembly.

4. Provide _____-hour-rated self- or automatic closing doors (CBC 715.4.8, CBC Table 715.4) and _____-hour-rated windows (CBC Table 715.5) in _____-hour-rated fire barriers.
5. Dwelling units shall be separated from each other and from other occupancies per the following (CBC 420, CBC 709, CBC 712.3, CBC 715.4, CBC 715.4.8.3, CBC 1207):
    - ❑ Walls (provide details specifying CBC Table 720.1(2) assembly number or alternate listed assembly):
        - o 1-hour fire rating extending from foundation/floor to roof sheathing
            Exception: 30-minute fire rating acceptable if sprinklered
            Exception: Wall assemblies need not extend through attic if draftstops or fireblocks provided per CBC 709.4
        - o Airborne sound insulation with minimum 50 STC rating (provide details specifying Gypsum Association assembly number or alternate listed assembly)
    - ❑ Floors/ceilings (provide details specifying CBC Table 720.1(3) assembly number or alternate listed assembly):
        - o 1-hour fire rating with supporting construction of equal or greater fire rating
            Exception: 30-minute fire rating acceptable if sprinklered
        - o Airborne sound insulation with minimum 50 STC rating and impact sound insulation with minimum 50 IIC rating (provide details specifying Gypsum Association assembly number or alternate listed assembly)
    - ❑ Doors:
        - o 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss
            Exception: 20-minute fire rating acceptable if 1/2-hour wall assembly allowed (sprinklered)
    - ❑ Fire-rated penetrations (specify listing number and manufacturer of fire-stopping material) per CBC 713

6. Construction supporting fire barriers and fire partitions shall have an equivalent fire rating. (CBC 707.5.1, CBC 709.4)

7. Openings in ❑ fire barriers ❑ fire partitions exceed limits in CBC 707.6 and CBC 715.5.8.

8. Provide shaft enclosure per CBC 708.2. Detail 1-hour-rated assembly – connecting fewer than four stories – and specify 1-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 708, CBC 715.4.8.3)

9. Separated elevator lobbies required per CBC 708.14.1. Detail 1-hour-rated assembly and specify 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 708.14, CBC 715.4.8.3)

10. Provide hoistway venting of elevators and dumbwaiters penetrating more than three stories per CBC 3004.

11. Detail 1-hour-rated shaft enclosure assembly for refuse/laundry chutes and specify 1-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 708.4, CBC 708.13.1, CBC 715.4.8.3)

12. Detail 1-hour-rated fire barrier enclosing refuse/laundry chute access and termination rooms and specify 3/4-hour-rated self- or automatic-closing doors with activation by smoke detection or power loss. (CBC 708.13.3, CBC 708.13.4, CBC 715.4.8.3)

H. FIRE PROTECTION SYSTEMS

1. Provide automatic sprinkler system per CBC 903.2.8.

2. Provide standpipe system per CBC 905.

3. Provide ❑ manual ❑ automatic fire alarm system per CBC 907.2.9.

4. Indicate smoke alarms/detectors – interconnected and hard-wired with battery back-up – in the following locations on floor plans or utility plans of residential occupancies (CBC 907.2.11):
   - ❑ Within each sleeping room
   - ❑ Outside each separate sleeping area in immediate vicinity of bedrooms
   - ❑ On each story within dwelling unit

5. Indicate carbon monoxide alarms – interconnected and hard-wired with battery back-up – in following locations on floor plans or utility plans of dwelling units with fuel-burning appliances or an attached garage (CBC 420.4):
   - ❑ Outside each separate sleeping area in immediate vicinity of bedrooms
   - ❑ On each story of dwelling unit

I. FIRE-RATED CONSTRUCTION

1. Detail individual protection of fire-rated structural members per CBC 704.

2. Detail protection of fire-rated columns and connections per CBC 704.2.

3. Provide corner guards or noncombustible jacket not less than 5 feet above finished floor for fire-rated structural members subject to vehicular impact. (CBC 704.9)

4. Provide details for all through and membrane penetrations of fire-rated assemblies, including recessed fixtures, pipe penetrations, electrical boxes, sprinkler penetrations and ducts. (CBC 713.3, CBC 713.4)

5. Through and membrane penetrations of fire-rated walls shall be protected by an approved penetration firestop system tested in accordance with ASTM E814 or UL 1479 and shall have an F rating of not less than the required rating of the wall penetrated. Provide details and specify listing number of the firestop system. (CBC 713.3)
6. Annular space of through penetrations of concrete or masonry fire-rated walls by steel, ferrous or copper pipes, tubes or conduits – maximum 6-inch nominal diameter and maximum 144-square-inch opening in wall – may be protected by concrete, grout, or mortar installed for the full thickness of the wall or the thickness required to maintain the fire rating provided the material prevents the passage of flame and hot gases. Provide details. (CBC 713.3.1)

7. Membrane penetrations of maximum 2-hour-rated walls allowed for steel electrical boxes not exceeding 16 square inches provided the aggregate area of openings does not exceed 100 square inches in any 100 square feet of wall area and such boxes on opposite sides of the wall are separated by one of the following (CBC 713.3.2):
   - ❑ Minimum 24-inch horizontal distance
   - ❑ Horizontal distance not less than depth of wall cavity if filled with loose-fill, rock wool, or slag mineral wool insulation
   - ❑ Solid fireblocking
   - ❑ Listed putty pads protecting both boxes (specify listing number)
   - ❑ Other listed materials and methods (specify listing numbers)

8. Through penetrations of fire-rated floors/ceilings shall be protected by an approved penetration firestop system tested in accordance with ASTM E814 or UL 1479 and shall have an F rating and T rating of at least 1 hour and not less than required rating of floor/ceiling penetrated. Provide details of firestop system and specify listing number. (CBC 713.4.1.1.2)

9. Through penetrations of fire-rated floors/ceilings are allowed for the following (CBC 713.4.1.1):
   - ❑ Penetrations by steel, ferrous or copper conduits, pipes, tubes or vents or concrete or masonry items through a single fire-rated floor where the annular space is protected with materials that prevent the passage of flame and hot gases (detail and specify listing number)
   - ❑ Penetrations in a single concrete floor by steel, ferrous or copper conduits, pipes, tubes or vents – maximum 6-inch nominal diameter – provided the concrete, mortar or grout is installed for the full thickness of the floor or the thickness required to maintain the fire rating (detail)
   - ❑ Penetrations not limited to single concrete floor if area of opening through each floor does not exceed 144 square inches
   - ❑ Penetrations by listed electrical boxes tested for use in fire-rated assemblies (specify listing number)

10. Membrane penetrations of fire-rated floor/ceilings are allowed for the following (CBC 713.4.1.2):
   - ❑ Penetrations by steel, ferrous or copper conduits, pipes, tubes or vents or concrete or masonry items where the annular space is protected as required for through penetrations or to prevent free passage of flame and the products of combustion and aggregate area of membrane opening does not exceed 100 square inches in any 100 square feet of floor/ceiling areas (detail and specify listing number)
   - ❑ Penetrations of maximum 2-hour-rated floor/ceiling by maximum 16-square-inch steel electrical boxes provided aggregate area of such penetrations does not exceed 100 square inches in any 100 square feet of floor/ceiling area
   - ❑ Penetrations by listed electrical boxes tested for use in fire-rated assemblies (specify listing number)

11. Noncombustible penetrating items shall not connect to combustible materials beyond the fire-rated assembly. (CBC 713.3.3, CBC 713.4.1.4)

12. Provide ___-hour-rated fire dampers for duct/air-transfer penetrations of ❑ fire walls, ❑ fire barriers, ❑ shaft enclosures, ❑ fire partitions, ❑ corridors, ❑ fire-rated floor/ceiling assemblies. (CBC 716, CBC Table 716.3.2.1)

13. Provide smoke dampers with Class II leakage ratings for duct/air-transfer penetrations of ❑ fire barriers, ❑ shaft enclosures, ❑ corridors, ❑ smoke barriers, ❑ smoke partitions. (CBC 716)

14. Provide complying shaft enclosure or listed ceiling radiation damper (specify listing number) for duct/air-transfer penetrations of fire-rated floor/ceiling assemblies. (CBC 716.6)

15. Detail fireblocking at the following locations (CBC 717.2):
   - ❑ Vertically at ceiling and floor levels and horizontally at intervals not exceeding 10 feet in concealed spaces of stud walls and partitions, furred spaces, and parallel rows of studs or staggered studs
   - ❑ Interconnections between concealed vertical stud wall or partition spaces and concealed horizontal spaces created by floor joists/truss
   - ❑ Between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, and cove ceilings
   - ❑ Concealed spaces between stair stringers at the top and bottom of the run
   - ❑ Openings around vents, pipes, ducts, chimneys and fireplaces at ceiling and floor levels (using material approved to resist free passage of flame and products of combustion – specify listing number)
   - ❑ Between attic spaces and chimney chases for factory-built chimneys and fireplaces
   - ❑ Maximum intervals of 20 feet – with no open space exceeding 100 square feet – in concealed spaces of exterior wall finish and other exterior architectural elements
   - ❑ In the spaces between the floor slab and underside of wood flooring where wood sleepers used such that no open spaces under the flooring exceed 100 square feet or communicate between rooms

16. Detail draftstops at floor levels above and in line with dwelling unit separation in buildings with three or more dwelling units. (CBC 717.3)
    Exception: Draftstopping not required in sprinklered buildings (other than high-rise)

17. Detail draftstops subdividing attics, mansards, overhangs, and other concealed roof spaces above and above and in line with dwelling unit separation in buildings with three or more dwelling units. (CBC 717.4)
    Exception: Draftstopping not required in sprinklered buildings (other than high-rise)

18. Joints in fire-rated walls, floors, ceilings, and roofs shall comply with CBC 714. Detail all joints on the plans.

19. Specify interior wall and ceiling finish for all spaces on plans. Space labeled _____ required to have class _____ finish per CBC Table 803.9.

J. EXITING

1. Provide egress plan addressing all occupiable spaces and indicating the following (CBC 1004):
   - ❑ Occupant load at individual spaces with CBC Table 1004.1.1 occupant load factor(s) and applicable gross/net floor area specified at each space
     Exception: Occupant load for fixed seating areas shall be calculated per CBC 1004.7
   - ❑ Intended egress routes with cumulative occupant load specified at exit doors, corridors, stairways, and intervening rooms
   - ❑ Overall occupant load of building

2. Building requires _____ exits from _____ story. (CBC Table 1021.1, CBC Table 1021.2)

3. Space labeled _____ requires _____ exits. (CBC Table 1015.1, CBC Table 1021.1)

4. Dimension between exits or exit-access doors from _____ shall be least one-half the maximum overall diagonal of area served (measured in straight line between exits or exit-access doors). (CBC 1015.2.1)
   Exception: Separation may be one-third the maximum overall diagonal in sprinklered buildings

5. Exit separation required by item J.4 must be maintained to exit discharge. (CBC 1015.2.1)

6. Exit travel distance from space labeled _____ exceeds allowable values per CBC Table 1016.1.

7. Egress from space labeled _____ may not pass through space labeled _____. (CBC 1014.2)

8. Egress from space labeled _____ must offer **two** separate and distinct paths to **two** exits before occupants travel _____ feet. (CBC 1014.3)

9. Dimension minimum 44-inch corridor width or as required for occupant load served. (CBC 1005.1, CBC 1018.2)
   Exception: Minimum 36-inch corridor width acceptable when serving occupant load less than 50

10. Where more than one exit required, corridor dead ends may not exceed 20 feet. (CBC 1018.4)
    Exception: Maximum 50 feet in sprinklered R-2 and U occupancies
    Exception: Dead-end corridor length not limited where dead-end length is less than 2.5 times dead-end width

11. Fire-rated corridors required in sprinklered R occupancies with corridor occupant load greater than 10. (CBC Table 1018.1)

12. If rated corridors required by item J.11, provide the following (CBC Table 1018.1, CBC 1018.6, CBC 715):
    - ❑ 1-hour-rated corridors walls and/or floors/ceilings per CBC 709 fire partition provisions (detail and specify CBC Table 720.1(2) and/or CBC Table 720.1(3) assembly numbers on plans or cite reference for alternate approved assembly)
    - ❑ 1/3-hour-rated self- or automatic-closing doors activated by smoke detection or power loss
    - ❑ 3/4-hour-rated windows (with cumulative area not exceeding 25% of common wall area with any room)
    - ❑ Continuity from point of entry to exit with no intervening rooms

13. Specify width, height, and operation type of all doors. (CBC 1008)

14. All egress doors – including those provided in excess of number required – must meet the following (CBC 1005.1, CBC 1008.1, CBC 1126A.6, CBC 1133B.2.5.2):
    - ❑ Minimum 32-inch clear width (at least one door leaf providing this width at double doors)
    - ❑ Maximum 48-inch door leaf on swinging doors
    - ❑ Minimum 6-foot-8-inch clear height
    - ❑ Hardware minimum 34 inches and maximum 44 inches above finished floor

15. Exit door _____ from space labeled _____ does not provide adequate clear width to serve occupant load shown on egress plan. (CBC 1005.1)

16. Loss of exit door _____ from space labeled _____ reduces available capacity to less than 50% required capacity. (CBC 1005.1)

17. *Note on plans*: “Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.” (CBC 1008.1.9)

18. Egress doors shall be side-hinged swinging or pivoted. (CBC 1008.1.2)
    Exception: Doors within a single dwelling unit
    Exception: Manually operated horizontal-sliding doors acceptable in areas with an occupant load of 10 or less

19. Exit doors – including those provided in excess of number required – shall swing in direction of egress when serving an occupant load of 50 or more or an H occupancy. (CBC 1008.1.2)

20. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1005.2):
    - ❑ Door in fully open position reduces required width of egress component by more than 7 inches
    - ❑ Door in any position reduces required width of egress component by more than 50%

21. ❑ Revolving door, ❑ power-operated door, ❑ horizontal-sliding door, ❑ access-controlled egress door at space labeled _____ does not meet egress provisions for special doors. (CBC 1008.1.4)

22. Specify on door schedule any locking or latching hardware. Locks or latches only allowed on doors from individual dwelling units (night latch, dead bolt, or security chain openable without key or tool). (CBC 1008.1.9.3)

23. Provide at least one emergency egress door or window complying with the following at each basement and sleeping room below the fourth story above grade (CBC 1029):
    - ❑ Minimum 5.7-square-foot clear opening area
      Exception: Minimum 5.0-square-foot clear opening area acceptable for grade-level room
    - ❑ Minimum 24-inch clear opening height
    - ❑ Minimum 20-inch clear opening width
    - ❑ Maximum 44-inch sill height above floor
    - ❑ Opening directly to public way or yard/court opening to public way
    - ❑ Where sill height is below grade level, window well provided per CBC 1029.5

    Exception: Item J.23 not applicable in sprinklered R-2 occupancies of types I, IIA, IIIA, or IV construction

24. Provide exit enclosures for interior exit stairways and ramps per the following (CBC 1022, CBC Table 715.4):
    - ❑ Enclosure used exclusively for egress and leading directly to building exterior
    - ❑ Separated from building with 1-hour-rated fire barriers (detail assemblies and specify CBC Table 720.1(2) and/or CBC Table 720.1(3) assembly numbers on plans or cite reference for alternate approved assembly)
    - ❑ Protection of any enclosure exterior walls with proximity to other parts of building per CBC 1022.6
    - ❑ Openings into enclosure limited to those providing access into or egress from enclosure
      Exception: Unprotected openings to exterior as allowed
    - ❑ Openings 1-hour-rated and self- or automatic-closing
    - ❑ No elevators opening into enclosures

    Exception: Enclosures not required for stairways serving an occupant load of less than 10 and not open to more than one level above or below level of exit discharge

    Exception: Enclosures not required within dwelling or sleeping units

25. Exterior egress elements shall comply with the following (CBC 1019, CBC 1026.6):
    - ❑ Exterior balconies:
      - o Comply with corridor requirements for width, headroom, and dead ends
      - o Separated from interior of building by walls and opening protection required for corridors
        Exception: Separation not required where balcony served by at least two stairs and dead-end travel condition does not require travel past unprotected opening to reach stair
      - o Long side minimum 50% open, with open area above guards distributed to minimize accumulation of smoke/gas
    - ❑ Exterior stairways and ramps:
      - o Open on at least one side, with minimum 35 square feet of aggregate open area adjacent to each floor level and intermediate landing and located minimum 42 inches above floor/landing level
      - o Adjoining open areas shall be yards, courts, or public ways
      - o Located minimum 10 feet from adjacent lot lines and other buildings on same lot without exterior wall protection
      - o Separation from interior of building per CBC 1026.6

26. Provide stairway dimensions complying with the following on floor plans and building sections (CBC 1009):
    - ❑ Minimum 44-inch clear width or as required for occupant load served
      Exception: Minimum 36-inch clear width acceptable for stairways serving occupant load of less than 50
    - ❑ Minimum 6-foot-8-inch headroom
    - ❑ Landing width equivalent to stairway width
    - ❑ Landing depth equivalent to stairway width (up to 48 inches)
    - ❑ Maximum 12-foot vertical rise between floor levels or landings

27. Door _____ from space labeled _____ reduces required dimension(s) as follows (CBC 1009.5):
    - ❑ Door in fully open position projects more than 7 inches into stairway landing
    - ❑ Door in any position reduces required landing width by more than 50%

28. Dimension stairway risers and treads complying with the following (CBC 1009.4.2):
    - ❑ Minimum 4-inch and maximum 7-inch riser height
    - ❑ Minimum 11-inch tread depth
      Exception: Maximum 7-3/4-inch riser height and minimum 10-inch tread depth acceptable within dwelling units

29. Winding stairways allowed as means of egress only for the following (CBC 1009.4.3, CBC 1009.8, CBC 1009.9):
    - ❑ Within dwelling units per the following:
      - o Minimum 10-inch tread depth at 12 inches from inside edge and minimum 6-inch tread depth at any point within stairway clear width
    - ❑ Curved stairways per the following:
      - o Minimum 11-inch tread depth at 12 inches from inside edge and minimum 10-inch tread at any point within stairway clear width
      - o Smallest radius at twice required stairway width
    - ❑ Spiral stairways per the following:
      - o Serving dwelling units or space not more than 250 square feet with maximum 5 occupants
      - o Minimum 26-inch clear width
      - o Minimum 6-foot-6-inch headroom
      - o Maximum 9-1/2-inch riser height
      - o Minimum 7-1/2-inch tread depth at 12 inches from inside edge

30. Detail stairway risers and treads complying with the following (CBC 1009.4.5):
    - ❑ Solid risers
        Exception: Open risers acceptable if stairway does not serve as accessible means of egress and if openings between treads do no permit passage of 4-inch-diameter sphere
        Exception: Open risers acceptable in spiral stairways complying with item J.29
    - ❑ Risers vertical or sloped under tread above at maximum 30 degrees from vertical
    - ❑ Maximum 1-1/4-inch nosings beyond the tread below
    - ❑ Maximum 9/16-inch radius of curvature at nosings
    - ❑ Maximum 9/16-inch beveling of nosings

31. Dimension and detail stairway handrails complying with the following (CBC 1009.12, CBC 1012):
    - ❑ Provided on each side of stairway
        Exception: Handrails not required on stairways with three or fewer risers in dwelling units
        Exception: Handrails acceptable on one side of stairway within dwelling units and at spiral stairways
    - ❑ Intermediate handrails provided as needed such that all portions of required stairway width within 30 inches of handrail
    - ❑ Located at uniform height minimum 34 inches and maximum 38 inches vertically above tread nosings
    - ❑ Maximum 4-1/2-inch projection into required stairway width
    - ❑ Continuous for full length of stairway flight
        Exception: Handrails within dwelling units may be interrupted by newel posts at turns
    - ❑ Extending minimum 12 inches horizontally beyond top riser
    - ❑ Sloping for depth of one tread beyond bottom riser (plus horizontal extension if required per CBC 11A or CBC 11B)
        Exception: Extensions not required at stairways within dwelling units
    - ❑ Minimum 1-1/2-inch clearance between handrails and adjacent walls
    - ❑ Grip size and shape per CBC 1012.3

32. Provide coordinated details specifying the following stairway elements designed for CBC Table 1607.1 stair live loads:
    - ❑ Stringer sizes
    - ❑ Landing joists and beams
    - ❑ Hangers

33. Walls and soffits within enclosed usable spaces beneath stairways shall be minimum 1-hour rated or required rating of stairway enclosure. (CBC 1009.6.3)
    Exception: 1/2-inch gypsum board protection acceptable beneath stairs serving single dwelling unit

34. Provide guard complying with the following at any open-sided walking surface – including mezzanines, balconies, decks, stairs, ramps, and landings – located more than 30 inches vertically above adjacent floor or grade within 36 inches horizontally of open-side edge (CBC 1013):
    - ❑ Minimum 42-inches high above walking surface
        Exception: Minimum 34-inch-high guard acceptable at open side of stairs within dwelling units
    - ❑ Openings in guard may not allow passage of 4-inch-diameter sphere
        Exception: From 36-inch to 42-inch guard height, openings may not allow passage of 4-3/8-diameter sphere
        Exception: At open sides of stairs in dwelling units, openings may not allow passage of 4-3/8-inch-diameter sphere
        Exception: Triangular openings formed by riser, tread, and bottom rail of guard may not allow passage of 6-inch-diameter sphere

35. Provide coordinated connection details specifying the following for guardrail systems including glass (CBC 1607.7, CBC 2407.1):
    - ❑ Glass shall be tempered
    - ❑ Glass thickness (designed with safety of factor of 4 considering CBC 1607.7 guardrail loads)
    - ❑ Member sizes
    - ❑ Means of connection

36. Indicate on electrical plans illumination and emergency power along egress paths per CBC 1006.

37. Indicate on egress plan location of the following signage and coordinate with electrical plans as applicable (CBC 1011):
    - ❑ Illuminated exit signs at the following:
        - o Where path of egress not immediately visible to occupants
        - o At intervening exit doors
        - o Within 100 feet of all points in corridors
            Exception: Exit signs not required in rooms or spaces requiring only one exit
    - ❑ Tactile signs at the following:
        - o At each grade-level exterior exit door
        - o At each exit door leading to grade-level exterior exit door via stair, ramp, exit enclosure, or horizontal exit
        - o At each exit door from interior room or area required to have illuminated exit sign
    - ❑ Path marking at rated corridors

K. ACCESSIBILITY

1. The plans are substantially incomplete with respect to accessibility items. Provide complete dimensions, details, and notes.
2. Provide complete accessibility plans, details, dimensions, and notes per the following (CBC 11A):
   - ❑ Accessibility correction list 1A: Code applicability, site accessibility, and exterior routes of travel
   - ❑ Accessibility correction list 2A: Parking facilities
   - ❑ Accessibility correction list 3A: Curb ramps
   - ❑ Accessibility correction list 4A: Pedestrian ramps
   - ❑ Accessibility correction list 5A: Entrances, exits, and interior routes of travel
   - ❑ Accessibility correction list 6A: Doors and gates
   - ❑ Accessibility correction list 7A: Stairways
   - ❑ Accessibility correction list 8A: Elevators and platform/wheelchair lifts
   - ❑ Accessibility correction list 9A: Common-use toilet facilities
   - ❑ Accessibility correction list 10A: Common-use shower, bathing, and locker room facilities
   - ❑ Accessibility correction list 11A: Drinking fountains
   - ❑ Accessibility correction list 12A: Public telephones
   - ❑ Accessibility correction list 13A: Alarms (if alarm system required per item H.3)
   - ❑ Accessibility correction list 14A: Common-use amenities
   - ❑ Accessibility correction list 15A: Dwelling units

L. SAFETY GLAZING

1. Specify tempered glass at the following locations requiring safety glazing (CBC 2406.4):
   - ❑ Glazing in swinging, sliding, and bi-fold doors
   - ❑ Glazing within 24-inch arc of door in closed position and within 60 inches of floor or walking surface
     Exception: Glazing with intervening wall or barrier between door and glazing
     Exception: In dwelling units, glazing in walls perpendicular to plane of door in closed position other than wall toward which door swings when opened
   - ❑ Glazing in enclosures or walls facing showers, bathtubs, hot tubs, whirlpools, saunas, and steam rooms and less than 60 inches above standing or walking surface
   - ❑ Glazing within 36 inches horizontally and 60 inches vertically of stairway, ramp, or landing walking surfaces
   - ❑ Glazing within 60 inches horizontally and 60 inches vertically of bottom stairway tread
   - ❑ Glazing adjacent to walking surfaces per the following:
     - o Exposed area of individual pane minimum 9 square feet
     - o Bottom edge of glazing within 18 inches of floor
     - o Top edge of glazing more than 36 inches above floor
     - o Walking surface within 36 inches – measured horizontally and in straight line – of glazing

2. In dwelling units where operable windows located more than 6 feet above adjacent grade or surface below, the lowest part of the clear window opening shall be minimum 24 inches above the finished floor. (CBC 1405.13.2)
   Exception: Windows with openings not allowing passage of 4-inch-diameter sphere when in largest opened position
   Exception: Windows provided with fall prevention devices, window guards, or window opening limiting devices

M. PARTITION WALLS AND SUSPENDED CEILINGS

1. Detail connection of all partition walls to roof/floor/ceiling above and floor below. Partitions attached to suspended ceilings must be laterally braced to the building structure.

2. Provide complete details for suspended ceiling systems indicating (ASCE 7 13.5.6.2.2):
   - ❑ Heavy duty T-bar grid system
   - ❑ Perimeter support on minimum 2-inch closure angles; two adjacent ends of ceiling grid shall be attached to closure angles while other ends shall have 3/4-inch clearance from walls and rest upon and be free to slide on closure angles;
   - ❑ Lateral bracing to building structure (ceiling areas exceeding 1000 square feet)
   - ❑ Seismic separation joints (ceiling areas exceeding 2500 square feet)
   - ❑ Lighting fixtures, electrical conduits and cable trays supported by building structure
   - ❑ Minimum 2-inch rings/sleeves/adapters for sprinkler heads allowing minimum 1-inch movement in all horizontal directions
   - ❑ If listed assembly proposed, include listing number on plans and specify ID numbers of main runners and cross runners

N. ROOF ASSEMBLIES

1. Specify roof material and underlayment.

2. Specify ICC, UL, or equivalent listing report number and manufacturer for roofing material (tile, metal, built-up, etc.).

3. *Note on roof plan or elevations:* “Roofing shall have a class A fire rating.” (County Building Code 92.1.1505.1)

4. *Note on roof plan or elevations:* “Cool roof required.”

5. Specify roof pitch.

6. Specify on plans layer-by-layer assembly of any built-up roofing systems – include coordinated assembly number from manufacturer's listing report – to verify required fire rating achieved at roof pitch proposed.

7. Roof pitch is not adequate for roof type specified (CBC 1507). Provide minimum pitch of _____.

8. Specify 1/4:12 minimum roof pitch for drainage on roof plan **or** design to support accumulated water. (CRC 1503.4, CBC 1611.1, CBC 1611.2)

9. Detail roof drains, overflows, and scuppers and indicate location on roof plan per the following (CBC 1503.4, CPC 1101.11):
   - ❑ Drains installed at low point of each roof
   - ❑ Any scuppers placed level with roof surface in walls or parapets
   - ❑ Overflows or scuppers provided per one of the following:
     - o Overflows with same size as roof drains installed 2 inches above low point of roof
     - o Scuppers with minimum 4-inch opening height
   - ❑ Separate drain and overflow outlets required

10. Indicate on plans approved waterproof decking material for balconies/decks over interior spaces (CBC 1503.1). Specify manufacturer and ICC, UL, or equivalent listing report number.

11. Indicate on roof plan location and size of attic vents per the following (CBC 1203.2):
    - ❑ Minimum 1 foot of net vent area required for every 150 square feet of attic area (verify with calculation on roof plan)
      Exception: Net vent area of 1/300 attic area acceptable if between 50% and 80% of vents located in upper portion of attic minimum 3 feet above eave or cornice vents with balance of required vents provided by eave or cornice vents (as allowed per item O.8)
    - ❑ Vents positioned to provide cross ventilation to each attic area

12. Specify on roof plan the following for each skylight (CBC 2405):
    - ❑ Size and location
    - ❑ Glazing material
    - ❑ Screening as required per CBC 2405.3
    - ❑ Manufacturer and ICC, UL, or equivalent listing report number

O. WILDFIRE-RESISTIVE CONSTRUCTION REQUIREMENTS

1. Indicate on plan location and size of fuel modification zone per the following (County Fire Code 96.1.4907.2):
   - ❑ Dimension minimum 100-foot fuel modification zone from perimeter of each structure
   - ❑ Fuel modification zone may not cross property lines or encroach into open space easements
   - ❑ If lot dimensions do not allow full 100-foot fuel modification zone, *note on plot plan*: "Entire lot is fuel modified."

2. Relocate structure labeled _____ to achieve 30-foot fire setback from property lines. (County Fire Code 96.1.4907.1.1)

3. In roof coverings where the profile creates space between the roof covering and combustible roof decking, specify one of the following means of protecting spaces at eave ends (County Building Code 92.1.705A.2):
   - ❑ Fire-stopping with approved materials (e.g., non-combustible birdstops for curved tile)
   - ❑ One layer of No. 72 ASTM cap sheet installed over combustible decking
   - ❑ Otherwise constructed to prevent intrusion of flames and embers

4. Exposed valley flashings shall be constructed with minimum 26-gauge corrosion-resistant metal installed over minimum 36-inch-wide single layer of No. 72 ASTM cap sheet running full length of valley. (County Building Code 92.1.705A.3)

5. Any roof gutters shall be provided with means to prevent accumulation of leaves and debris. (County Building Code 92.1.705A.4)

6. Skylights shall be tempered glass. (County Building Code 92.1.705A.5)

7. All vents (roof, foundation, combustion-air, etc.) shall comply with comply with the following (County Building Code 92.1.706A.1):
   - ❑ Protected by louvers and 1/8-inch noncombustible, corrosion-resistant mesh
     Exception: Approved vents resisting intrusion of flames and embers
   - ❑ Turbine attic vents equipped to allow rotation in only one direction

8. Vents prohibited in eaves, eave overhangs, soffits, or cornices. (County Building Code 92.1.706A.2)
   Exception: Approved vents resisting intrusion of flames and embers
   Exception: Gable-end vents allowed if located minimum 12 inches below lowest eave/rake projection
   Exception: As allowed by building official and local fire authority and per eave details in guidance document PDS #198

9. Detail eaves, soffits, and fascias per guidance document PDS #198. (County Building Code 92.1.706A.3)

10. Specify exterior wall finish complying with one of the following (County Building Code 92.1.707A.1):
    - ❑ Noncombustible material (stucco, cement fiber board, masonry, etc.)
      Exception: Minimum 3/4-inch wood siding or 3/8-inch plywood installed over 1/2-inch fire-rated gypsum board
    - ❑ Ignition-resistant material
    - ❑ Heavy timber
    - ❑ Log wall construction

11. Enclose underfloor areas to the ground with exterior wall construction per item O.10. (County Building Code 92.1.709A.4.2.2)

12. Specify on window and door schedules exterior windows, exterior glazed doors, glazed openings within exterior doors, and glazed openings within exterior garage doors complying with one of the following (County Building Code 92.1.708A.2):
    - ❑ Multi-paned glass with minimum one tempered pane (vinyl frames shall have welded corners and metal reinforcement in interlock area)
    - ❑ Glass block units
    - ❑ Minimum 20-minute fire-rated

13. Specify on door schedule exterior doors complying with one of the following (County Building Code 92.1.708A.3):
    - ❑ Exterior surface or cladding of noncombustible or ignition-resistant material
    - ❑ Solid-core wood minimum 1-3/8-inch thick
    - ❑ Minimum 20-minute fire-rated

14. Detail patio cover, carport, and trellis construction complying with any of the following (County Building Code 92.1.709A.1):
    - ❑ Noncombustible material
    - ❑ 1-hour fire-rated material
    - ❑ Approved exterior fire-retardant treated wood
    - ❑ Modified heavy timber (minimum 2x tongue-and-groove sheathing, 4x6 rafters/beams, 6x6 posts/columns)

15. Detail deck, balcony, and exterior stair construction complying with the following (County Building Code 92.1.709A.1):
    - ❑ Framing (any of the following):
      - o Noncombustible material
      - o 1-hour fire-rated material
      - o Approved exterior fire-retardant treated wood
      - o Modified heavy timber (minimum 4x8 joists, 4x10 or 6x8 beams, 6x6 posts/columns)
    - ❑ Decking and tread material (any of the following):
      - o Noncombustible material
      - o 1-hour fire-rated material
      - o Approved exterior fire-retardant treated wood
      - o Approved alternative decking material meeting test requirements of County Building Code 92.1.709A.1.4

16. Paper-faced insulation prohibited in attics or other ventilated spaces. (County Building Code 92.1.711A.1)

17. Specify on plans any portion of a fence or other structure within five feet of building shall be constructed per one of the following (County Building Code 92.1.712A.1):
    - ❑ Noncombustible material
    - ❑ Approved exterior fire-retardant treated wood
    - ❑ Material meeting same fire-resistive standards as exterior walls of building

P. ELECTRICAL, MECHANICAL, AND PLUMBING REQUIREMENTS

1. Provide adequate natural or artificial lighting in all spaces per CBC 1205.

2. *Note on plans:* "The project will comply with the County of San Diego lighting ordinance."

3. Provide adequate natural or mechanical ventilation of all spaces per CBC 1203.

4. Building requires ❑ restroom(s) ❑ drinking fountain(s) per CPC Table 4-1.

5. Indicate on plans location of mechanical units and water heaters.

6. Gas-fired water heaters and furnaces located in bedrooms or bathrooms shall comply with one of the following (CPC 505.1, CMC 904.1):
    - ❑ Installed in dedicated closet with listed, gasketed, self-closing door with all combustion air from the outdoors
    - ❑ Water heater or furnace shall be a direct-vent appliance

7. Indicate on floor plans access openings per the following to attics housing mechanical or plumbing appliances (CMC 904.11):
    - ❑ Minimum 22 inches by 30 inches or size of largest appliance component
    - ❑ Located maximum 20 feet from appliance where attic passageway height less than 6 feet

8. Specify manufacturer, model, and ICC, UL, WH, or equivalent listing report number – UL and ANSI *standard* numbers are insufficient – demonstrating the following for each prefabricated fireplace, wood stove, or pellet stove (CBC 2111.13.1, CALGreen 4.503.1):
   - ❑ Gas fireplaces are direct-vent sealed-combustion type (applies to new buildings only)
   - ❑ Wood stoves and pellet stoves comply with U.S. EPA Phase II emission limits (applies to new buildings only)
   - ❑ Chimney shrouds are part of the approved fireplace assembly

9. Masonry fireplaces must be constructed per county details (make completed PDS #180 a permanent part of plans) **or** per engineered design with coordinated structural details and calculations. (CBC 2111)

Q. ENERGY EFFICIENCY REQUIREMENTS

1. Provide complete energy efficiency compliance documentation. Project shall comply with the 2008 Building Energy Efficiency Standards for low-rise residential buildings.

2. The following completed energy forms shall be completed and made a permanent part of plans with compliance statements signed (CF-1R shall be registered for projects requiring HERS verification and/or diagnostic testing):
   - ❑ CF-1R: Certificate of compliance for new buildings and additions greater than 1000 square feet
   - ❑ CF-1R ADD: Certificate of compliance for additions 1000 square feet or less
   - ❑ CF-1R ALT: Certificate of compliance for alterations to existing construction
   - ❑ MF-1R: Mandatory measures summary

3. Designer's license number shall be on CF-1R form. If designer is unlicensed, owner shall sign compliance statement for designer.

4. Project shall comply with energy requirements for climate zone _____.

5. Building orientation in compliance documents must be consistent with plot plan and floor plan.

6. Specify on building sections R-values of wall, ceiling, raised-floor, and slab-perimeter insulation as required by CF-1R form.

7. In order to accommodate the required insulation thickness, a minimum rafter/stud depth of _____ will be required.

8. Fenestration indicated on floor plans and elevations shall comply with the following:
   - ❑ Area and orientation matching CF-1R form
   - ❑ For prescriptive submittals, total fenestration within maximum allowed area
   - ❑ For prescriptive submittals, west-facing fenestration within maximum allowed area
   - ❑ ____ maximum U-factor and/or ____ maximum SHGC

9. Provide the following cool roof information on CF-1R form:
   - ❑ Cool Roof Rating Council (CRRC) Product ID Number;
   - ❑ Roofing product type;
   - ❑ Roofing product weight (< 5 psf or ≥ 5 psf);
   - ❑ Aged solar reflectance and thermal emittance **or** solar reflectance index (make SRI worksheet a permanent part of plans)

10. Specify on CF-1R form the efficiency, type, and capacity/size of each of the following proposed appliances:
    - ❑ Heating units
    - ❑ Cooling units
    - ❑ Water heaters
11. Specify on plans any special features required per CF-1R form (e.g., shading screens, thermal mass, etc.).

12. Provide **large, clear** note on **roof plan or elevations**: "Radiant barrier is required."

13. *Note on the plans:* "At least half the installed wattage of luminaires (except lighting internal to cabinets) in kitchens shall be high efficacy; low efficacy fixtures must be switched separately. Lighting internal to cabinets shall use no more than 20W of power per linear foot of illuminated cabinet."

14. All luminaires in bathrooms, garages, laundry rooms, utility rooms, and other rooms or areas that are not a kitchen shall either be high efficacy or controlled by a vacancy sensor (or dimmer switch for other rooms only). Specify one of these measures for each new or remodeled room.

15. Specify high-efficacy luminaires or manually switched, low efficacy luminaires controlled by motion sensor and photocontrol, astronomical time clock, or energy management control system (EMCS) for each outdoor lighting fixture.

16. *Note on the plans:* "A mechanical exhaust system, supply system, or combination thereof shall be installed for each dwelling unit to provide whole-building ventilation with outdoor air complying with ASHRAE Standard 62.2-2007 as adopted by the California Energy Commission."

17. *Note on the plans:* "An intermittently or continuously operating local mechanical exhaust system (with outdoor air) shall be installed in each kitchen and bathroom complying with ASHRAE Standard 62.2-2007 as adopted by the California Energy Commission. Intermittent local ventilation exhaust airflow rates shall be 50 cfm in bathrooms and 100 cfm in kitchens. Continuous local ventilation exhaust airflow rates shall be 20 cfm in bathrooms and 5 ach (air changes/hour) in kitchens based on kitchen volume."

18. Doors between garages and occupiable spaces (enclosed spaces including habitable spaces, bathrooms, closets, halls, storage and utility areas, etc.) shall be gasketed or made substantially airtight with weather stripping.

19. Provide a **large, clear** note on the plot plan: "Properly completed and signed Installation Certificates (CF-6R forms) shall be provided to the inspector in the field. For projects requiring HERS verification and/or diagnostic testing, the CF-6R forms must be registered. Forms are available for download online at: http://www.sdcounty.ca.gov/dplu/bldg/energy-stds.html."

20. Provide a **large, clear** note on the plot plan: "HERS verification and/or diagnostic testing required. Properly completed (forms filled out by hand not allowed), registered, and signed Field Verification and/or Diagnostic Testing Documentation (CF-4R forms) shall be provided to the inspector in the field. Forms are available for download online at: http://www.sdcounty.ca.gov/dplu/bldg/energy-stds.html."

R. VERTICAL LOAD SUPPORTING SYSTEM REQUIREMENTS

1. Provide a complete roof/floor framing plan.

2. Structure exceeds conventional framing limits of CBC 2308.2. Provide engineered design per *California Building Code.*

3. Framing shall comply with all recommendations made in engineering calculations.

4. Justify the following loads used in design (CBC 1606, CBC 1607):
   - ❑ Roof live load (psf)
   - ❑ Roof dead load (psf)
   - ❑ Floor live load (psf)
   - ❑ Floor live load (concentrated loads)
   - ❑ Floor dead load (psf)

5. Provide complete structural detailing for the project.

6. Cross-reference all framing details with the appropriate plans.

7. Delete all non-applicable details from plans.

8. Specify plywood grade, thickness, panel span rating, and nailing for roof/floor sheathing. (CBC Table 2304.7(3))

9. *Note on plans:* "Plywood shall be continuous under California fill."

10. Specify on framing plans the size, orientation, span, and spacing as applicable for the following structural elements:
    - ❑ Rafters
    - ❑ Ceiling joists
    - ❑ Beams
    - ❑ Floor joists
    - ❑ Headers
    - ❑ Posts
    - ❑ Columns

11. Provide two complete sets of truss drawings and coordinate with roof framing plan. (CBC 2303.4)

12. Identify trusses on roof framing plan by file/ID/sequence number **or** make truss layout a permanent part of plans.

13. Design trusses for bearing at perpendicular interior shear walls.

14. Detail 1/2-inch clearance between trusses and non-bearing walls.

15. Indicate on roof framing plan support for ridge/hip/valley intersections. (CBC 2308.10.4.1)

16. Detail rafter-tie connections at conventionally framed areas and specify connection nailing. (CBC Table 2308.10.4.1)

17. Provide metal straps across ridge beam and rafters.

18. Specify camber requirements and combination symbol for all glue-laminated wood members on plans.

19. *Note on plans:* "A certificate of conformance is required prior to framing inspection for glue-laminated wood members."

20. Specify the make and model number of all proposed truss/beam/joist hangers.

21. Specify size and type (double stud, post, etc.) of support for beams/headers – 4x12 and larger – and girder trusses.

22. Detail all beam-to-post, post-to-beam, and post-to-footing connections.

23. Specify stud size and spacing for all walls. (CBC Table 2308.9.1)

24. Balloon frame walls of rooms with sloping ceilings (rake walls). Specify on plans which walls are balloon framed.

25. Specify on plans fasteners for preservative-treated-wood (in all applications) and fire-retardant-treated-wood (in exterior applications) shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CBC 2304.9.5)
    Exception: Plain carbon steel fasteners in SBX/DOT and zinc borate preservative-treated wood in dry, interior environment
    Exception: Fasteners other than nails, timber rivets, wood screws, and lag screws may be mechanically deposited zinc-coated steel

S. LATERAL LOAD RESISTING SYSTEM REQUIREMENTS

1. Provide engineered lateral design per *California Building Code*. Building does not meet the following bracing requirements of CBC 2308:
   - ❑ Building is an irregular structure per CBC 2308.12.6
   - ❑ Shear walls not constructed per acceptable bracing methods of CBC Table 2308.12.4
   - ❑ Shear walls exceed maximum height-to-width ratio per CBC Table 2308.12.4 and do meet alternative bracing requirements of CBC 2308.9.3
   - ❑ Braced wall line spacing exceeds 25 feet per CBC 2308.12.3
   - ❑ Insufficient cumulative shear wall length within braced wall line(s) per CBC Table 2308.12.4
   - ❑ Shear wall spacing within braced wall line(s) exceeds 25 feet per CBC 2308.9.3
   - ❑ Shear walls located more than 8 feet from ends of each wall line per CBC 2308.12.4
   - ❑ Shear walls offset more than 4 feet from braced wall line(s) per CBC 2308.9.3

2. Justify the 0.2-second spectral response acceleration, S_S, and 1-second spectral response acceleration, S_1, used in the engineering calculations. (CBC 1613.5.1)

3. Justify the response modification coefficient, R, used in the engineering calculations. (CBC 1613.1)

4. Justify the redundancy factor, ρ, used in the engineering calculations. (CBC 1613.1)

5. Shear walls and lateral load resisting elements shall comply with all recommendations made in engineering calculations.

6. Specify on framing plans location, type, and length of all shear walls and coordinate with shear-wall schedule.

7. Shear wall types may not be mixed within the same braced wall line. (CBC 2308.12.4)

8. Specify nail size and spacing for all shear walls and roof/floor diaphragms. Specify any required blocking. (CBC Table 2306.2.1(2), CBC Table 2306.3)

9. Indicate on roof framing plan 2x ridge blocking for roof diaphragm nailing.

10. Provide shear-transfer connection details for shear walls (interior and exterior) at roof, floors, and foundation. Cross-reference all shear-transfer details with the appropriate plans. (CBC 2308.3.2)

11. Make manufacturer‘s structural detail sheet(s) for engineered shear panels (e.g., Strong-Wall, Hardy Frame, TJ, Shear Max, etc.) a permanent part of the plans.

12. Provide details for interior shear walls indicating shear transfer from roof/floor diaphragm above.

13. Provide shear-transfer details at openings in shear walls. (CBC 2305.1.1)

14. Provide drag straps on each side of bay windows and flush beams where plate lines are interrupted.

15. Where shear wall forces exceed 350 pounds per foot, all framing members receiving edge nailing from abutting panels shall be minimum 3-inch nominal members or double 2-inch nominal members. (CBC Table 2306.3)

16. Specify construction of cripple walls per the following (CBC 2308.9.4, CBC 2308.12.4):
   - ❑ Framed with studs equivalent to studs above
   - ❑ If more than 4 feet high, framed with studs required for an additional story
   - ❑ If less than 14 inches high, framed with solid blocking
   - ❑ Considered an additional story and braced per CBC Table 2308.12.4

17. Specify location/type of all hold-downs on foundation plan (grade-level hold-downs) and framing plan (upper-level hold-downs).

T. FOUNDATION REQUIREMENTS

1. Provide a complete and fully dimensioned foundation plan.

2. Foundation elements shall comply with all recommendations made in soils/compaction report and engineering calculations.

3. Site inspection revealed presence of expansive soils. Provide soils report with foundation design recommendations.
   Exception: Single-story structures at locations where moderately expansive soil conditions exist may comply with the requirements for expansive soil foundation design per form PDS #65 in lieu of providing a soils report

4. Indicate on foundation plan location and size of underfloor vents per the following (CBC 1203.3):
   - ❑ Minimum 1 foot of net vent area required for every 150 square feet of underfloor area (as demonstrated by calculation provided on foundation plan)
   - ❑ Located to provide adequate cross-ventilation to all underfloor areas

5. Indicate on foundation plan location of minimum 18-inch by 24-inch access openings to all underfloor areas. (CBC 1209.1)

6. Dimension underfloor clearance off grade of 18 inches for floor joists and 12 inches for floor girders **or** specify preservative-treated wood. (CBC 2304.11.2.1)

7. Dimension the following vertical clearances for wood framing, sheathing, and siding at exterior walls **or** specify preservative-treated wood (CBC 2304.11.2.2, CBC 2304.11.2.6):
   - ❑ Minimum 8 inches for wood sill plates and sheathing above adjacent natural grade
   - ❑ Minimum 6 inches for wood siding above adjacent natural grade
   - ❑ Minimum 2 inches for wood studs, sheathing, and siding above adjacent concrete slab

8. Dimension the following vertical clearances for wood posts and columns **or** specify preservative-treated wood (CBC 2304.11.2.7):
   - ❑ For posts in crawl spaces and supported by concrete piers or metal pedestals:
     - o Minimum 8 inches above natural grade
   - ❑ For posts exposed to weather and supported by concrete piers or metal pedestals:
     - o Minimum 6 inches above natural grade
     - o Minimum 1 inch above concrete slab

9. Detail wall sill plate anchorage to foundations per the following (CBC 2308.3.3, CBC 2308.6, CBC 2308.12):
   - ❑ Minimum 1/2-inch-diameter anchor bolts
     Exception: Minimum 5/8-inch-diameter anchor bolts required in Seismic Design Category E
   - ❑ Minimum 7-inch embedment into concrete or masonry
   - ❑ Bolts spaced maximum 6 feet on center
     Exception: Maximum 4 feet on center for buildings more than two stories in height
   - ❑ Minimum two bolts per sill plate section with one bolt located maximum 12 inches and minimum 4 inches from each end of each section
   - ❑ Steel plate washers per the following provided between sill plate and nut of each anchor bolt:
     - o Minimum 3 inches by 3 inches by 0.229 inch
     - o If standard cut washer placed between plate washer and nut, hole in plate washer may be diagonally slotted with maximum 3/16-inch larger width than bolt diameter and maximum 1-3/4 inch slot length

10. Provide footing details specifying all dimensions and reinforcement. Cross-reference all details with foundation plan.

11. Provide a step footing detail. (CBC 2308.11.3.2)

12. Unless otherwise specified by soils report, dimension minimum 7-foot horizontal distance from bottom leading edge of footings to daylight.

13. Provide adequate footings under all bearing walls and shear walls.

14. Provide adequate spread footings under posts/columns (where required due to post/column load).

15. Specify on foundation plan slab thickness, reinforcement, and moisture barrier. (CBC 1805.2.1)

16. Provide details specifying the following for concrete or masonry wall construction:
    - ❑ Maximum overall height
    - ❑ Maximum height of any retained soil
    - ❑ Maximum stem wall height
    - ❑ Wall type (cantilevered or restrained)
    - ❑ Wall material (concrete or masonry) with required material strength
    - ❑ Wall thickness
    - ❑ Vertical and horizontal reinforcement:
        - o Bar size and spacing
        - o Bar position (edge or center) with dimension from face of wall
    - ❑ Footing/key dimensions and reinforcement
    - ❑ Means of restraint (restrained walls)
    - ❑ Drainage system behind walls retaining soil
    - ❑ Waterproofing for walls retaining soil and adjacent to usable space

U. SUPPLEMENTAL ADDITION AND ALTERATION REQUIREMENTS

1. Provide floor plan for existing spaces adjacent to addition/alteration with door sizes, window sizes, and types indicated – including doors/windows to be removed – to verify compliance with light, ventilation, and egress requirements.

2. Provide framing and/or foundation plans for existing structure at _____ to verify existing construction adequate to support proposed added loads.

3. Detail means of achieving positive connection between addition(s) and existing construction at the following:
    - ❑ Plate lines (detail on framing plans)
    - ❑ Footings and slabs (detail on foundation plans)

4. Detail installation of hold-downs and/or anchor bolts in existing foundations. Specify manufacturer and listing number of epoxy, expansion anchors, wedge anchors, etc., as applicable.

V. ADDITIONAL REQUIREMENTS (MAY BE APPLICABLE)